

## JOB OFFER

Position in the project:	Postdoc
Scientific discipline:	Chemistry, Materials Engineering, Biochemistry, Natural Sciences, Physics
Job type (employment contract/stipend):	full-time employment contract
Number of job offers:	1
Remuneration/stipend amount/month (*X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN*):	5600 - 7750 net (8000 - 11000 gross) – depending on experience
Position starts on:	01-09-2018 (negotiable)
Maximum period of contract/stipend agreement:	max. until 30.12.2020
Institution:	Chemistry Department, Wrocław University of Science and Technology
Project leader:	Dr Joanna Olesiak-Banska
Project title:	Nonlinear Optics, Nanoparticles and Amyloids (NONA) – application of nonlinear optics and gold nanoparticles to study amyloid formation  <b><i>Project is carried out within the First Team programme of the Foundation for Polish Science</i></b>
Project description:	The presented project will address the issue of the amyloid formation and search for new techniques and materials applicable in the imaging and control of the protein aggregation. Within this project we are going to apply gold nanoparticles as markers for near-infrared fs laser imaging and studies on the formation and morphology of amyloids. We will establish how one can use these tools to image the amyloid organization, as well as to interfere with protein aggregates formation and control the transformation of amyloids into non-toxic species. Moreover, we will explore nonlinear optical properties of amyloids as a potential source of enhanced selectivity of optical imaging of amyloids. Finally, we will investigate liquid crystalline properties of amyloids and self-organization in amyloids – nanoparticles systems.
Key responsibilities include:	<ol style="list-style-type: none"> <li>1. Preparation and characterization of the structure and optical properties of amyloids and nanoparticles</li> <li>2. Microscopy of prepared structures (two-photon microscopy, atomic force microscopy)</li> <li>3. Nonlinear optical spectroscopy of amyloid and amyloid-nanoparticle systems</li> <li>4. Automatization of the procedures, data acquisition and results preparation</li> <li>5. Reports writing</li> <li>6. Collaboration with other participants of the project</li> </ol>
Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. PhD degree (or equivalent) in the field of Chemistry, Physics, Natural Sciences or related (or a set date of the PhD thesis defence, not later than 12.2018)</li> <li>2. Proven experience in multiphoton microscopy, nonlinear optics, protein aggregation and folding, or spectroscopy and microscopy of nanostructures</li> <li>3. At least one first author publication in reputable journal</li> <li>4. Fluent spoken and written English</li> </ol>

	5. Ability to work in a team as well as independently
Required documents:	<ol style="list-style-type: none"> <li>1. CV (max. 2 pages)</li> <li>2. Motivation letter ()</li> <li>3. PhD diploma (copy)</li> <li>4. List of significant achievements including all publications, scientific internships and conference presentations</li> <li>5. Two recommendation letters and the contact details of referees (preferably a current or previous supervisor)</li> </ol> <p>After the first stage several qualified candidates will be invited for an interview with experts.</p>
We offer:	Participation in a highly interdisciplinary project with a strong collaboration with laboratories from University of Cambridge (United Kingdom) and Institut de Génétique et de Biologie Moléculaire et Cellulaire IGBMC (Ilkirch, France)
Please submit the following documents to:	joanna.olesiak@pwr.edu.pl
Application deadline:	10.06.2018
For more details about the position please visit (website/webpage address):	<a href="http://kimmz.webcloud.pwr.edu.pl/badania/nona/">http://kimmz.webcloud.pwr.edu.pl/badania/nona/</a>
Euraxess job/stipend offer (in case of PhD and postdoc positions):	<a href="https://euraxess.ec.europa.eu/jobs/297314">https://euraxess.ec.europa.eu/jobs/297314</a>

Please include in your offer (in a motivation letter):

"I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended."